# AGENDA ITEM V I PROGRESS REPORT ON CONDITIONALLY APPROVED UNIT LOUISIANA STATE UNIVERSITY AND A&M COLLEGE STEPHENSON DISASTER MANAGEMENT INSTITUTE (SDMI)

# **AGENDA ITEM V I**

# PROGRESS REPORT ON CONDITIONALLY APPROVED UNIT

# LOUISIANA STATE UNIVERSITY AND A&M COLLEGE

# STEPHENSON DISASTER MANAGEMENT INSTITUTE (SDMI)

# **BACKGROUND INFORMATION**

In April 2007, the Board of Regents granted conditional (one-year) approval for the aforementioned Institute. The Board acted as follows:

Conditional approval is granted for the proposed Stephenson Disaster Management Institute at Louisiana State University and A&M College for a period of one year, effective immediately. As required by Board of Regents Academic Affairs Guidelines: Proposed New Centers, Institutes, and Other Academic/Research Units, LSU shall submit to the Commissioner of Higher Education a proposal for full approval of this center by May 1, 2008. If this proposal is not forthcoming by this date, the Board of Regents shall re-examine the need for this Institute.

The University submitted the requested proposal for full (five-year) approval in July, 2008, following its approval by the LSU Board of Supervisors at their meeting that month.

### STAFF ANALYSIS

The staff reminds the Regents that the University received an \$11M gift from Louisiana residents and LSU alumni, Emmet and Toni Stephenson. This largesse was donated in response to the commendable actions of the University following the events of Hurricane Katrina. Following Board of Regents approval in Spring of 2007, the Institute opened its doors at the University in September of that year. This Institute's main objective is to conduct research which will enhance the quality of crisis and disaster management around the world.

### Personnel

With regard to personnel activity in its first year of existence (AY 2007-2008), the University reports the following:

The first year has been successful. The SDMI has recruited top-quality staff, has initiated exciting research projects, has submitted several funding proposals, and has established ties with a wide range of top schools both nationally and abroad. This proposal forwards the case for approval of the SDMI as a permanent non-state supported research unit.

The University reports that during the Institute's first year of existence it has hired a director, an associate director, an assistant director, and a development officer. At the commencement of the upcoming academic year, the Institute will initiate searches to hire four (4) full-time faculty to be affiliated with the Institute. With regard to future years' activities, the University notes:

### **Institute Activities**

# The report notes:

The SDMI management team has initiated a strategic planning process in order to focus SDMI on those research and education activities where it can do the most good —that is, where SDMI and LSU have special capability and where there are important unmet needs. We briefly summarize the most important aims that the SDMI will pursue in the coming years.

### Research

The SDMI team will pursue a broad research agenda that directly serves its mission as outlined above. The following items feature prominently on that agenda.

- The information problem. During a crisis or disaster, it is crucially important to get an accurate picture of the evolving situation. The coordinators of the response need to know how the threat is developing, what the response partners are doing, and what the damage is. In reality, it has proven extremely difficult to effectively organize and analyze information streams. We know why disaster managers often fail to make sense of the situation. The SDMI will identify those factors that enhance a more comprehensive and accurate situational assessment.
- The communication problem. It has proven frustratingly difficult during many disaster response operations to organize lines of communication between all those involved. Communication means often break down (in spite of continuing technological fixes that promise to resolve this problem). Rumors infiltrate and pollute raw data. More importantly, however, is the problem of miscommunication: relaying the wrong information to partners, citizens, media, and other stakeholders. The SDMI will extract the lessons from the extensive field of communication studies and probe their validity in the context of crisis and disaster management. The SDMI will pay special attention to the role of the media during crises and disasters.
- Designing a highly reliable response system. A response organization is called upon to perform only sporadically. When it does, the network has to meet (preferably surpass) design specifications. It must, in other words, be highly reliable under extreme circumstances that are hard to simulate. Two problems coincide here. One is the problem of high reliability: we do not know what exactly makes a network of organizations reliable. Another is the problem of institutional design: even if we do know the success factors, it is not always clear how to build these into public networks. The SDMI will bring together the two research fields that work these questions. The result will be a clearly formulated vision on the design of response networks.
- Nurturing effective leadership. In any disaster response operation, a select number of

tasks fall within the exclusive domain of executive leadership. For instance, it is the task of formal leaders to facilitate improvisation on the ground, make certain critical decisions and communicate to the stricken population what is going on and what is being done to mediate the damage. In practice, most leaders (many of which deal with a disaster only once in their lifetime), have no proper conception of their role. The SDMI will identify the critical tasks of effective leaders and validate the importance of these tasks by studying a large set of disaster cases.

- Selecting and training effective leaders. One of the great unknowns in crisis and disaster research is why some individuals perform their leadership tasks more effectively than others. If we can find out why some people perform crisis tasks better under conditions of stress and uncertainty, it may become possible to select incoming leaders for their crisis performance characteristics and train incumbents to enhance their performance. The SDMI will search for characteristics that make a difference and formulate a profile of effective crisis managers.
- Formulate a normative model of disaster management performance. One of the persistent pathologies underlying public, political and academic discourse on crisis and disaster management issues is the absence of a shared model of expectations. What can we reasonably expect from leaders that are confronted with the sudden onset of a mega disaster? In hindsight, it is easy to see where they failed. But if we really want leaders to put their talents to use without worrying too much about possible future repercussions, we must specify what constitutes acceptable leadership practices during such events. SDMI will explore existing models and map expectations among the public, politicians and the disaster management community. SDMI will formulate a normative model and put it up for public and academic scrutiny.
- Organizing the logistics of disaster response. After a society is struck by massive disruption of critical infrastructures, paralysis and breakdown of routine processes follow quickly. As a result, elementary goods and service are no longer available. This, in turn, makes it hard to repair critical infrastructures. To break this vicious circle, outside intervention is often necessary. Recent disasters have demonstrated that a disconnect exists between national levels of preparedness and local needs. It appears that public bureaucracies find it painfully difficult to shift massive resources effectively and rapidly to a stricken area. Much can be learned from best practices developed in the private sector (notable examples include Wal-Mart and FedEx). The SDMI will study large-scale logistical chains in the private sector and translate these lessons to the context of public disaster management.
- Saving animal lives. In modern society, people increasingly attach value to the lives of animals (pets, life stock, and wild animals). The practice of crisis and disaster response has not adapted to this new reality. As a result, response operations are hampered by the unwillingness of citizens to be evacuated without their pets and livestock. The structure and practices of crisis and disaster response operations must be adapted in light on this new reality. The SDMI will explore how this can be done.
- Facilitating coordination. A response network typically consists of multiple organizations, many of which have never worked with each other before. Coordination is both crucially important and impossibly hard to achieve on the fly. The key to

understanding why some response operations perform well whereas many fall apart can be found in the empirical work of disaster sociologists. It appears that coordination is a self-organizing process that can be facilitated (and frustrated) by those in charge of the response operation. The SDMI will build on this research and deliver a solid theoretical framework that can be tested in case studies. It will study how cooperation works in multi-level systems. This framework will provide crisis and disaster managers with actionable insights that will make response operations more effective.

- The politics of crisis and disaster management. One would expect public authorities to cooperate during a disaster in order to save lives and avert the threat at hand. This often is not the case, however. During crises and disasters, political fault lines do not disappear. The prospect of future gains and losses motivates to a significant degree the actions of actors in the disaster response network. It is crucial to understand the political dynamics of crisis and disaster management, which will help to increase the effectiveness of the response. The SDMI will work with experienced practitioners to test and validate theoretically derived insights, and to develop additional insights.
- International cooperation. Mega disasters of the future will increasingly require sustained international cooperation, both in the immediate response phase and in the aftermath. As critical infrastructures become ever more complex and integrated across borders, nation states will not be able to deal with major disturbances by themselves. This poses major challenges, as countries cooperate hesitatingly at best when it comes to international disaster assistance. Much of the international response is facilitated by, and channeled through, non-governmental organizations (NGOs) such as the International Red Cross, Doctors without Borders, etc. The SDMI will work towards the formulation of a new disaster response paradigm that can enhance transatlantic cooperation in the face of transboundary crises and disasters.
- Building societal resilience. Recent disasters have demonstrated the limited capacity of existing response systems. One way to provide increased safety and security is to enhance this capacity (much of our research agenda serves exactly that purpose). A complementary approach is to build resilience into first line responders (which typically include officials, volunteers, and citizens). A resilient society is characterized by the ability to rapidly and innovatively reconfigure available capacities in response to the sudden paralysis of critical infrastructures. The SDMI will investigate what leaders can do to enhance resilience and how they can exploit its potential during disasters.
- Learning to improvise. One of the key skills required from leaders, first-line operators, and citizens alike is the art of improvisation. While few dispute its importance, disaster and crisis researchers have spent little time studying this personal and organizational characteristic. The SDMI aims to cull the psychological and organizational literature on improvisation, with an eye on developing means to train individuals and design this capacity into response organizations.
- Crises and disasters of the future. The threats of the future will likely differ from those we prepare for today. New threats emerge as a result of technical developments (ITC; genetic research), climate change and violent ideologies. Globalization and system synergies allow these threats to penetrate easily and unnoticed. SDMI will identify the driving factors behind the new threats, explore their capacity to do harm, and audit

existing crisis and disaster management structures and practices on their capacity to deal with these events.

In pursuit of this ambitious research agenda, which will help SDMI become a premier interdisciplinary research institute, SDMI members will engage in the following activities:

- The SDMI research team will publish its findings in top academic journals and academic presses. Its members should produce at least 3-5 articles and one book per year.
- The SDMI will regularly submit high-quality proposals to national and international research funding organizations. Minimum: 5 sizeable proposals per year.
- SDMI members will present their work at academic conferences.
- SDMI members will sit on editorial boards of journals and book series.
- SDMI members will propose to edit a book series with an international top publisher.
- SDMI will attract top researchers who will spend sabbatical time at the Institute (ranging from days to a full year). The first researchers should be invited by the fall of 2008.
- SDMI will establish and institutionalize relations with other top institutes (in the US and abroad).
- SDMI will select and train graduate students to assist in research projects.
- SDMI will seek collaboration with academic departments at LSU to create jointly funded Ph.D. positions.

# **Education**

The SDMI aims to excel in developing applied research: this means that the findings will have to be translated into insights and practices that can help politicians, policymakers, disaster and crisis managers, and business executives improve their performance in times of urgent distress. These insights and practices have to be disseminated through intelligent, inspiring and captivating executive courses. To this end, the SDMI will initiate the following activities:

- Summarize patterns, pathologies and best practices that crisis and disaster leaders need to know into a program of study. The program will be delivered in a highly interactive mode, enriched with telling illustrations. The SDMI will develop and test a pilot of the program during the Fall of 2008.
- Design and develop a basic repertoire of disaster simulations that can be used to raise awareness, support planning, audit standing organizations and policies, and explore vulnerabilities and strengths. The SDMI will develop and test its first simulation during the fall of 2008.
- Design upon request custom-built courses and simulations for defined practitioner audiences. The SDMI will identify a partner for which it will adapt its program of study (The Red Cross being a viable candidate).
- The SDMI will produce educational DVDs that record lessons learned (successes and failures). These DVDs will be used in executive courses. The underlying philosophy that only people who have been "in the hot seat" can convincingly describe the challenges that political-administrative elites will face during a disaster or crisis.
- The SDMI will explore the possibilities of offering a regular freshman elected officials

conference to teach them about the incident command system, to explain their roles, responsibilities, and authority with respect to disaster preparedness and response, and to present case examples of success and failure.

### Outreach

The SDMI will continue to develop a comprehensive outreach strategy that ensures that the interests of researchers and responders are considered in the SDMI's implementation of its mission. A key consideration in the implementation of the outreach plan is the benefits that will be gained by engaging stakeholders in the four clusters of activities mentioned previously.

The SDMI plans to do this by engaging in the following activities:

Conferences – A comprehensive calendar that details upcoming conferences, call for paper deadlines and opportunities for addressing stakeholders will be continuously updated by SDMI staff. This allows SDMI to resourcefully select events that are most cost-effective and that will reach the broadest audience.

The SDMI Website (www.sdmi.lsu.edu) – The website hosts important information about the Institute such as Mission, Research Projects, SDMI Publications and Job Opportunities but will also provides useful links to Academic Partners, Recommended Journals and Associations. The website will serve as a fluid outreach tool that will allow the Institute to promote upcoming events and highlight key projects.

Lecture Series – While the Institute has a mission to become a world class organization, it is important to secure support and approval from our colleagues locally. The SDMI will initiate a "brown-bag lunch series" in which both SDMI researchers and top scholars in the field of disaster research will make presentations on the LSU campus. This helps the SDMI in two ways: 1- it further promotes the Institute and familiarizes LSU students and faculty with SDMI's research, and 2- it builds goodwill within the disaster and crisis research community.

Media/Publications – the SDMI will seek opportunities with reputable media outlets to speak on current events dealing with disasters and crises. For example, the SDMI will: 1-offer its expertise on disaster management with the local National Public Radio station and pursue other avenues, 2- write Op-Ed pieces when appropriate in response to current disasters and crises, and 3- respond to media inquiries when such a response is relevant to SDMI's mission. Additionally, the SDMI will seek opportunities with reputable publications, both academic and practitioner. For example, the SDMI will: 1-create a special issue for the Policy Studies Journal; 2- continue to submit articles to top-rated academic journals; and 3- review editorial calendars for practitioner publications and submit relevant articles.

# **Budget**

The Institute's existing and projected revenues along with anticipated costs through 2012 are detailed below. Figures in the budget denoted in *italics* are projected revenues yet to be received by the Institute:

Revenue	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Department of Homeland Security	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
MacArthur Foundation	\$22,000	\$22,000			
Swedish National Defense College	\$155,340				
University of Colorado - Boulder Natural Hazards Center	\$2,000				
Stephensons' donation	\$2,200,000	\$2,200,000	\$2,200,000	\$2,200,000	\$2,200,000
U.S. Department of Education Grant		\$449,909	\$547,994		
NSF (Infrastructure Management)		\$203,500	\$203,500		
FEMA (Fire Prevention & Safety)		\$499,129	\$499,129		
NSF (Human and Social Dynamics)		\$62,455	\$62,455	\$62,455	
LSU Faculty Research Grant		\$38,846			
Other <sup>1</sup>	\$186,600	\$400,000	\$2,054,916	\$3,057,545	\$3,920,000
Total	\$2,595,940	\$3,905,839	\$5,597,994	\$5,350,000	\$6,150,000

<sup>&</sup>lt;sup>1</sup> Staff notes that projected sources of revenue in the category of "Other" include the U.S. Department of Homeland Security (primary source) and the Centers for Disease Control.

Costs					
Administration Salary/Release	\$377,000	\$382,850	\$401,993	\$422,092	\$443,197
Administration Administrative Support	\$392,445	\$372,308	\$389,282	\$404,030	\$421,090
Faculty Salary/Release	\$318,800	\$911,940	\$1,561,716	\$1,599,802	\$1,691,667
Faculty Administrative Support	\$392,445	\$372,308	\$389,282	\$404,030	\$421,090
Faculty Travel	\$160,000	\$250,000	\$350,000	\$400,000	\$400,000
Technical Support	\$292,900	\$417,900	\$417,900	\$517,900	\$517,900
Graduate Teaching Assistantships	\$57,500	\$222,500	\$397,500	\$412,500	\$439,500
Equipment	\$75,000		\$100,000		
Supplies	\$150,000	\$165,000	\$181,500	\$199,650	\$219,615
Conferences	\$50,000	\$100,000	\$100,000	\$100,000	\$100,000
Total	\$2,266,090	\$3,194,805	\$4,289,172	\$4,460,004	\$4,654,060

### STAFF SUMMARY

The staff commends the University and the Institute for its accomplishments to-date. The Institute's scheduled plan for activities in the coming years is reasonable and should assist with disaster management efforts should such crises arise. While the Stephensons' donations provides the University/Institute with a solid basis with which to conduct appropriate research/activities, staff remains a bit concerned about the budget given that existing revenues do not adequately cover anticipated future-year costs. Staff notes that the Institute projects substantial funding from pending grant proposals submitted to the federal government, international agencies and private sources. As such, it is incumbent upon the University to make sure that projected sources of revenue come to fruition. While staff recommends full (five-year) approval of the Institute, a progress report shall be due by June 30, 2010, detailing external funding secured to afford Institute operations for the remaining time of the period of approval (through AY 2011-2012). Additionally, since the Institute has filled only administrative appointments, it will be necessary to provide documentation that the Institute's plan for filling key faculty appointments has materialized. Lastly, we note that the University has agreed to curtail Institute operations should the University fail to obtain the projected sources of revenue.

Given these circumstances, the staff tenders the following recommendation:

### STAFF RECOMMENDATION

The staff recommends that the Academic and Student Affairs Committee grant approval for the Stephenson Disaster Management Institute (SDMI) at Louisiana State University and A&M College through June 30, 2012, subject to the following stipulations:

- 1. By August 1, 2009, the University shall submit a progress report to the Associate Commissioner for Academic Affairs detailing faculty appointments affiliated with the Institute; and
- 2. By June 30, 2010, a second progress report detailing external funding to afford Institute operations shall be due to the Associate Commissioner for Academic Affairs.

Lastly, a request for reauthorization of Institute status shall be due to the Associate Commissioner for Academic Affairs by June 30, 2012. Should this request not be received by this date, the Board of Regents shall re-examine the need for this Institute.